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AUTHOR Brady-Ciampa, Bartholomew
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ABSTRACT

Graduates of masters' degree programs in education at a small midwestern state college were surveyed to determine the academic and attitudinal differences between those who had obtained their undergraduate degree at other institutions (regional group) and those who were continuing their study toward a graduate degree at the same college (provincial group). In Phase I of the study, examination of the undergraduate grade point averages and Graduate Record Examination scores of the last eight years of masters' degree recipients showed no significant differences between the provincial and the regional groups. In Phase II, when the same data were analyzed by graduate academic discipline, statistically significant differences emerged across the eight disciplines studied. Phase III measured the attitudinal differences between graduates of the regional and provincial groups for the past three years, using the California F-Scale and the Gough-Sanford Rigidity Scale. Data were categorized by the type of institution attended by the regional group members, but no significant differences were found. Phase IV measured attitude characteristics by graduate majors of the two groups. No significant differences resulted from the analysis of the Gough-Sanford Rigidity Scale results, but the California F-Scale produced enough data to warrant examining each of its nine subscales independently. Phase V validated the Likert-type scales used in Phases III and IV. The finding that academic and attitude differences were not institutionally based but discipline-related could have implications for admissions policies, accreditation standards, and personal counseling techniques. Appendices present comparisons of data collected on the graduate students. (FG)

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Academic Performance and Underlying Personality Predispositions of Provincial vs. Regional Graduate Students

by

Bartholomew Brady-Ciampa
Dean of Graduate Studies
Wayne State College
Wayne, Nebraska

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Introduction

During a recent study that was designed to determine the effectiveness of an institution's graduate programs, an unexpected variable emerged. The number and proportion of the institution's own undergraduate degree recipients who went on to enroll in its graduate school drew attention to the possibility that an inordinate level of provinciality might exist. Of eight graduate degree programs assessed over a five-year period it was found that 61 percent of all master's degrees had been awarded to students who had also received their baccalaureate degrees from the particular institution. In addition, when programs were examined individually, this "provinciality factor" ranged from 42 percent to 80 percent.

These findings raised questions that needed to be examined relating to the nature of the graduate student body. Questions concerning the academic performance of various groups of graduate students, the possibility of provincial attitudes being promulgated due to low levels of graduate student heterogeneity, the presence of general attitudinal differences that might be based upon prior academic experience or choice of academic discipline, and the existence of a relationship between the causes of any attitudinal differences and the effects these differences might have on graduate programs were some of the areas warranting initial investigation.

Consequently, it was hypothesized that no significant academic or attitudinal differences exist between graduate students who received all of their undergraduate and graduate preparation from the same institution (the provincial group) when compared to those who received their undergraduate and graduate training from different institutions (the regional group). It was further hypothesized that no significant academic or attitudinal

differences exist between groups of graduate students categorized by academic discipline regardless of the context of their undergraduate training.

Background

The institution in question is a small (FTE=approx. 2000), rural, residential, midwestern state college whose students are primarily full-time on the undergraduate level and part-time on the graduate level. Most students are midwesterners with the largest percentage of entering students coming from high schools in northeastern Nebraska and western Iowa.

The majority of these students come from farms or small rural towns since there are only a few cities in the College's service region. A total of 78 percent (1408) of the 1807 Nebraska students currently enrolled come from 15 counties in northeastern Nebraska. Another 20 percent (356) come from an additional 24 counties located in the northern two-thirds of the eastern half of Nebraska. Iowa far outdistances states other than Nebraska in providing students. Seventeen counties in extreme western Iowa account for over 83 percent (227) of the 273 enrolled Iowa students. These 227 students comprise 67 percent of the total of 340 out-of-state students. Consequently, over 95 percent of all undergraduate students enrolled at the institution come from within a one-hundred mile radius that is generally rural in nature and this pattern has existed for many years.

Those enrolled in graduate programs are predominantly in-service professionals who enroll for part-time coursework in programs leading to the Master of Arts in Education, Master of Science in Education, or endorsement programs leading to credentialing in several areas related to teacher education. Graduate student-credit-hours generated translate into approximately 250 full-time equivalent graduate students matriculated each year.

Design and Methodology

In order to achieve the purposes of this study it was necessary to design and execute a five phase model. Phase I was designed to examine the academic performance of the provincial and regional groups and to determine if significant differences exist between them. Phase II was designed to examine the academic performance of graduate students categorized on the basis of their graduate major area of study regardless of whether they received their undergraduate and graduate training from the same institution (provincial group) or from different institutions (regional group). Both Phase I and Phase II utilized undergraduate grade point averages (UGPA), Graduate Record Examination-Verbal (GRE-V), and Graduate Record Examination-Quantitative (GRE-Q) scores as determinant academic measures.

Phase III was designed to examine the attitudinal characteristics of the provincial and regional groups and to determine if significant differences exist between them. Phase IV examined the attitudinal characteristics of graduate students categorized by graduate major area of study regardless of whether they received their undergraduate and graduate training from the same institution (provincial group) or from different institutions (regional group). Both Phase III and Phase IV utilized subscales of the California F-Scale and the Gough-Sanford Rigidity Scale as determinant attitudinal measures.

Phase V of the study was designed as a validation device to determine if the "response collapsing to the mean" phenomenon often associated with Likert-type responses was a factor in the study.

Phase I: Academic Performance, Provincial vs. Regional Group

Undergraduate grade point averages (UGPA), Graduate Record Examination-Verbal (GRE-V), and Graduate Record Examination-Quantitative (GRE-Q) scores

were obtained for all who were awarded Master's degrees during the last eight years. No significant differences were obtained ($p < .05$) when the scores of the provincial group (those who received their undergraduate and graduate training from the same institution) were compared to the regional group (those who received their graduate and undergraduate training from different institutions) as per the data below.

Measure	Provincial Group	Regional Group	t-value	
$\bar{X}$ UGPA =	2.89	2.81	t = .78	non-significant at $p < .05$ level
$\bar{X}$ GRE-V =	426	429	t = .62	
$\bar{X}$ GRE-Q =	459	461	t = .20	

Phase II: Academic Performance by Graduate Major

When students who were awarded a master's degree during the last eight years were categorized by graduate academic discipline regardless of whether they belonged to the provincial or regional group, statistically significant differences occurred when the following UGPA, GRE-V, and GRE-Q data were examined.

	Bus.Ed.	Coun.Ed.	Eng.	El.Ed.	Hist.	Ind.Ed.	Phys.Ed.	Sch.Adm.
$\bar{X}$ UGPA	2.89	2.97	3.11	2.87	2.85	2.74	2.68	2.82
$\bar{X}$ GRE-V	379	457	544	430	449	373	383	440
$\bar{X}$ GRE-Q	470	474	480	433	427	451	445	516

When the eight graduate disciplines were compared with one another on the basis of UGPA, 8 of the 28 possible t-test comparisons proved significant at at least the $p < .05$ level (see Appendix A). When the eight graduate disciplines were compared with one another on the basis of GRE-V, 20 out of the 28 possible t-test comparisons proved significant at at least the

$p < .05$ level (see Appendix B). Further, when the eight graduate disciplines were compared with one another on the basis of GRE-Q, 8 of the 28 possible t-test comparisons proved significant at at least the $p < .05$ level (see Appendix C). Finally, when the three t-test matrices were superimposed upon one another, 24 out of the 28 possible comparisons were significant on either the UGPA and/or the GRE-V and/or the GRE-Q (see Appendix D).

This composite technique made it possible to determine which areas of study were the most and least similar on the basis of the three determinant academic measures.

Phase III: Attitudinal Characteristics, Provincial vs. Regional Group

The California F-Scale was originally designed to be used as an indirect measure of prejudice without mentioning the names of any specific minority groups and also as a measure of underlying personality predispositions (Rokeach, p. 12). It is a collection of items, each of which is highly correlated with the Anti-Semitism and Ethnocentrism Scale, and is composed of clinical material ". . . where, in subjects' discussions on such topics as self, family, sex, interpersonal relations, moral and personal values, there had appeared numerous trends which, it appeared, might be connected with prejudice." (Adorno, p. 222)

Through wide usage it was found that the instrument measured general tendencies which led to the formulation of enduring psychological dispositions in the person; i.e., stereotyping, conventionalism, concern with power, aggression, etc. (Adorno, p. 223)

> . . . a number of such variables were derived and defined, and they, taken together made up the basic content of the F scale. Each was regarded as a more or less central trend in the person which, in accordance with some dynamic process, expressed itself on the surface in ethnocentrism as well as in diverse psychologically related opinions and attitudes. These variables are listed below, together with a brief definition of each.
> a) Conventionalism. Rigid adherence to traditional, middle-

class values.

b) Authoritarian submission. Submissive, uncritical attitude toward idealized moral authorities of the ingroup.
c) Authoritarian aggression. Tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional order.
d) Anti-intraception. Opposition to the subjective, the imaginative, the tender-minded.
e) Superstition and stereotypy. The belief in mystical determinants of the individual's fate; the disposition to think in rigid categories.
f) Power and "toughness." Preoccupation with the dominance-submission, strong-weak, leader-follower dimension, identification with power figures; overemphasis upon the conventionalized attitudes of the ego; exaggerated assertion of strength and toughness.
g) Destructiveness and Cynicism. Generalized hostility, vilification of the human.
h) Projectivity. The disposition to believe that wild and dangerous things go on in the world; the projection outwards of unconscious emotional impulses.
i) Sex. Exaggerated concern with sexual "goings on." (Adorno, p. 228)

Although the F-Scale was originally designed as an indirect measure of prejudice and anti-democratic tendencies at the personal level, favorable correlates have also been widely achieved with such instruments as the Politico-Economic Conservatism (PEC) Scale, the Thematic Apperception Tests (TAT), the Rokeach Dogmatism and Opinionation Scales, and the Minnesota Multiphasic Personality Inventory (MMPI) (Megargee, p. 68).

Thirty-two items of the California F-Scale that revealed significant relationships regarding benign, progressive, and humanitarian sentiments at one end versus feelings of hostility, estrangement, and disbelief at the other, were chosen as the Tolerance (To) Scale of the California Psychological Inventory (CPI). The typical correlation of the To with the F-Scale is $r = -.50$. (Gough, p. 13)

In addition, significant correlations for both males and females ($p < .01$) occur between the Tolerance Scale and the Dominance (Do), Capacity for Status (Cs), Sociability (Sy), Sense of Well-Being (Wb), Responsibility (Re), Socialization (So), Self-Control (Sc), Good Impression (Gi), Achievement via Conformance (Ac), Achievement via Independence (Ai), Intellectual

Efficiency (Ie), and Psychological-mindedness (Py) Scales of the California Psychological Inventory. (Megargee, p. 106-7).

The Gough-Sanford Rigidity Scale, now identified as the Flexibility Scale of the California Psychological Inventory, was originally designed to identify people who are flexible, adaptable, and somewhat changeable in their thinking, behavior, and temperament and significant correlations through wide usage have been obtained with the Ethnocentrism Scale (from $r = .34$ to $r = .46$) and with the California F-Scale (from $r = .21$ to $r = .64$). (Megargee, p. 89)

Studies indicate that while low scores on the Gough-Sanford Rigidity Scale reflect rigidity, there is little support for the notion that high scorers are flexible. Some findings, however, have been obtained which relate high scores on the Scale to high levels of creativity. Mixed evidence also appears to indicate that the results of the Scale are curvilinear and this perspective should be maintained in the interpretation of data. (Megargee, p. 90)

During the past three-year period, graduate students enrolled in a required course titled "Introduction to Research" were asked to complete a questionnaire that elicited background/program information, and responses to the California F-Scale (Tolerance Scale of the California Psychological Inventory) and the Gough-Sanford Rigidity Scale (Flexibility Scale of the California Psychological Inventory). A total of 198 useable responses were obtained which represented more than 90 percent of the students enrolled in the course during that period. Data were categorized by institutional type; i.e., not only were graduate students categorized on the basis of provincial (those who received their undergraduate and graduate training from the same institution) and regional (those who received their

undergraduate and graduate training from different institutions) groups, but, in order to achieve more specific information, the graduates in the regional group were further categorized into those who received their undergraduate degrees from another in-state publicly-supported institution, from an in-state private institution, from an out-of-state publicly-supported institution, or from an out-of-state private institution.

No statistical significance ($p < .05$) occurred when data were examined by analysis of variance (one-way, fixed-effects) on either the California F-Scale (see Appendix E) or the Gough-Sanford Rigidity Scale (see Appendix F). Using these two determinant attitudinal measures, no significant differences were found to exist when the provincial group was compared to the regional group.

Phase IV: Attitudinal Characteristics by Graduate Major

When responses to the California F-Scale (and its concomitant subscales) and the Gough-Sanford Rigidity Scale were categorized by graduate major area of study the following results were obtained:

No significant differences ($p < .05$) occurred when an analysis of variance (one-way, fixed-effects) was performed on data generated by the Gough-Sanford Rigidity Scale and categorized by graduate students' major area of study (see Appendix G).

However, statistical significance ($p < .01$) did occur when an analysis of variance (one-way, fixed-effects) was performed on data generated by the California F-Scale and categorized by graduate students' major area of study (see Appendix H). As a result of this significant ANOVA a post-hoc t-test matrix of the California F-Scale was constructed comparing each of the eight graduate major areas of study with one another. Out of a total of 28 possible t-test comparisons, 12 proved to be significant at at least the $p < .05$ level. Consequently, it was decided to further

isolate this significance by examining each of the California F-Scale's nine subscales individually.

Conventionalism Subscale (see Appendix I). When the eight graduate major areas of study were compared to one another, 2 out of the 28 possible comparisons proved to be significant at the $p < .05$ level (t-tests, two-tail).

Authoritarian Submission Subscale (see Appendix J). When the eight graduate major areas of study were compared to one another, 9 out of the 28 possible comparisons proved to be significant at at least the $p < .05$ level (t-tests, two-tail).

Authoritarian Aggression Subscale (see Appendix K). When the eight graduate major areas of study were compared to one another, 10 out of the 28 possible comparisons proved to be significant at at least the $p < .05$ level (t-tests, two-tail).

Anti-Intraception Subscale (see Appendix L). When the eight graduate major areas of study were compared to one another, out of the 28 possible comparisons, no statistical significance ($p < .05$) occurred (t-tests, two-tail).

Superstition/Stereotyping Subscale (see Appendix M). When the eight graduate major areas of study were compared to one another, 1 out of the 28 possible comparisons proved to be significant at the $p < .05$ level (t-test, two-tail).

Power/Toughness Subscale (see Appendix N). When the eight graduate major areas of study were compared to one another, no statistical significance ($p < .05$) occurred (t-tests, two-tail).

Destructiveness/Cynicism Subscale (see Appendix O). When the eight graduate major areas of study were compared to one another, no statistical significance ($p < .05$) occurred (t-tests, two-tail).

Projectivity Subscale (see Appendix P). When the eight graduate major areas of study were compared to one another, no statistical significance ($p < .05$) occurred (t-tests, two-tail).

Sex Subscale (see Appendix Q). When the eight graduate major areas of study were compared to one another, 3 out of the 28 possible comparisons proved to be significant at the $p < .05$ level (t-tests, two-tail).

Phase V: Validation Technique, Likert-type Responses

A frequent criticism of the use of Likert-type scales in research methodology is the tendency of responses to "collapse" about the mean. Since Phases III and IV of this study utilized five-point Likert scales for responses to the items on the California F-Scale and Gough-Sanford Rigidity Scale, a technique was devised to determine if responses clustered about the means of the respective instruments.

Gough-Sanford Rigidity Scale: This instrument contains 22 items and incorporated a five-point Likert scale as follows: Strongly Agree (5) Agree (4) Undecided (3) Disagree (2) Strongly Disagree (1). Thus, the lowest possible total score was 22 X 1 = 22; the highest possible total score was 22 X 5 = 110; and the hypothetical "neutral" or undecided score was 22 X 3 = 66. When the mean score of the provincial group and the mean score of the regional group were compared to the hypothetical "neutral" score of 66, no statistical significance ($p < .05$) occurred (t-tests, two-tail). When the mean scores of the eight graduate areas of study were each compared to the hypothetical "neutral" score of 66, only one of the eight areas of study displayed a significant departure ($p < .05$) (see Appendix R).

California F-Scale: Form 45 of this instrument contains 29 items and incorporated a five-point Likert scale as previously indicated. Thus,

the lowest possible total score was 29 X 1 = 29; the highest possible total score was 29 X 5 = 145; and the hypothetical "neutral" or undecided score was 29 X 3 = 87. When the mean score of the provincial group and the mean score of the regional group were compared to the hypothetical "neutral" score of 87, statistical significance at at least the $p < .05$ level occurred in both cases (t-tests, two-tail). When the mean scores of the eight graduate areas of study were compared to the hypothetical "neutral" score of 87, statistical significance at at least the $p < .05$ level occurred for each of the eight comparisons (see Appendix S).

Summary, Implications, and Recommendations for Further Study

On the basis of the findings presented in Phase I and Phase III of this study, no significant academic or attitudinal differences exist between graduate students enrolled at the institution in question who received all of their undergraduate and graduate preparation from the same institution (the provincial group) when compared to those who received their undergraduate and graduate training from different institutions (the regional group).

However, as shown in Phase II and Phase IV of this study, when data were categorized by graduate major areas of study, statistically significant differences between students both on an academic and attitudinal basis were found to exist.

On the basis of the evidence presented, it appears that academic and attitudinal differences of graduate students at the institution in question are academic discipline-related regardless of whether students belonged to the provincial or the regional group.

Also, as shown in Phase V of the study, the Likert effect of responses "collapsing to the mean," although inconclusive regarding the Gough-Sanford Rigidity Scale, proved not to be a factor concerning the interpretation of the results of the California F-Scale. This finding enhances the credibility of the study.

Implications

The significance of this study could prove to be profound in at least two dimensions to institutions wishing to use this statistical model. First, it could be used to dispel the age-old myth of the possible detrimental effects of allowing seemingly inordinate levels of an institution's own undergraduates to matriculate in her graduate programs. This information can be crucial in providing evidence to nullify criticism by external accrediting agencies regarding the heretofore hypothetical negative effects of provincialism on institutional academic quality. (In fact, there is the very real possibility that significant positive correlations could exist between the proportion of provincial students in a particular academic program and the program's determinant academic measures.)

Second, as can be seen by the accompanying appendices, the data gathering process provides information specific to each of the institution's graduate programs. This information is very useful in monitoring adherence to graduate admissions criteria and the concomitant interrelationships between specific programs in this regard. In addition, the attitudinal characteristics can provide to faculty members and administrators insights which impact not only upon the curriculum but also upon academic support functions such as academic advising and personal counseling. The interpretation of each of the California F-Scale subtest matrices (Appendices I through Q) may be warranted in this regard depending upon the extent of significant findings.

Recommendations for Further Study

In the foregoing study, the t-test matrices that were generated by several of the California F-Scale subtests suggest that further investigation is necessary. As an example, a detailed examination of the results of the Authoritarian-Aggression Subscale follows.

Authoritarian-Aggression is defined as the tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional order (Adorno, p. 228).

Individuals who are forced to live under a system of relatively rigid restraints are likely to seek an object to serve as an outlet for hostility and also to become particularly distressed when others appear to be "getting away with something." It also follows that the extremely conventional person who is not able to actively criticize accepted authority may harbor desires to condemn, reject, and punish those who violate these values. As a result, the person who consciously regards his life, and concomitantly, himself to be proper may unconsciously internalize strong aggressive impulses. In this circumstance a wide variety of threatening contexts can arouse anxieties to the extent that the list of traits, behavior patterns, individuals, and groups to be condemned may grow very long. Authoritarian aggression, then, has to do with standards of conduct, with the authorities who enforce these standards, and with offenders against them who "deserve" to be punished (Adorno, p. 232-3).

Consequently, it was hypothesized that no significant differences in authoritarian-aggression attitudes exist between graduate students who received all of their undergraduate and graduate preparation from the same institution when compared to those who received their undergraduate and graduate training from different institutions. It was further hypothesized that no significant differences exist when scores of groups of graduate

students categorized by institutional type and academic discipline are compared to one-another, to the general population, and to the hypothetical "neutral" score resulting from neutral responses to each item on the Authoritarian-Aggression subscale of the California F Scale.

Authoritarian-Aggression subscale scores of groups of graduate students who had graduated from each of the institutional types under observation were compared with one another using two-tail t-tests and no statistically significant results ($p < .05$) were obtained.

When two-tail t-tests were performed using the scores of groups of graduate students categorized by academic discipline, significant differences occurred when Business majors were compared to Counselor Education majors ($p < .05$), English majors ($p < .01$), and History majors ($p < .05$); when Counselor Education majors were compared to Industrial Education majors ($p < .05$), and Physical Education majors ($p < .05$); when Elementary Education majors were compared to Industrial Education majors ($p < .05$), and Physical Education majors ($p < .05$); when English majors were compared to Industrial Education majors ($p < .01$), and Physical Education majors ($p < .01$); and when History majors were compared to Industrial Education majors ($p < .05$) (see Appendix K).

When Authoritarian-Aggression subscale scores of students were compared to the hypothetical "neutral" score of 24, significant differences were obtained for all institutional types and for six of the eight academic disciplines examined. The mean scores of students graduating from all institutional types and of students enrolled in all academic disciplines examined were below the hypothetical "neutral" score (see Appendix T).

When the mean Authoritarian Aggression scores of a 14 group sample of 919 men and 599 women were examined no significant differences from the hypothetical "neutral" score were found for mens' scores, womens' scores,

or mens' and womens' scores combined (see Appendix U). Further, the mean score of men was slightly above the "neutral" score while the mean scores of women and both groups combined were slightly below the "neutral" score (Adorno, pp. 258, 260).

No significant t-tests on the Authoritarian-Aggression subscale of the California F Scale when institutional types were considered indicate that graduate students enrolled at the particular institution in question are similar when this personality dimension is considered regardless of institutional type or of undergraduate training location. Therefore, the hypothesis that no significant differences in authoritarian-aggression attitudes exist between graduate students who received all of their undergraduate and graduate preparation from the same institution when compared to those who received their undergraduate and graduate training from different institutions is accepted. This result further reinforces the general findings of the study.

When two-tail t-tests were performed using the scores of graduate students categorized by academic disciplines, significant differences occurred in 10 of the 28 comparisons (involving Counselor Education majors, English majors, History majors, Industrial Education majors, and Physical Education majors).

Further, <u>all</u> mean scores of groups of students from the various institutional types were significantly below the hypothetical "neutral" score of 24 on the Authoritarian-Aggression subscale. Also, when mean scores of groups of students were categorized by academic discipline, six of the eight groups examined scored significantly below the "neutral" score, while two (Industrial Education and Physical Education majors) scored slightly below the "neutral" score.

The reader should note from Appendix U that when a sample of 1518

subjects categorized into 14 distinct groups were examined no significant differences from the hypothetical "neutral" score resulted. When this sample of 1518 subjects is viewed as the control group, the significant departures from the hypothetical "neutral" score by the treatment groups imply that there was no Likert "effect."

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t-test Matrix, Undergraduate Grade Point Average by Graduate Major

Appendix A

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	-.75	.28	-1.62	.25	1.58	2.40*	.78
B. Counselor Education		X	1.47	-1.14	.67	2.42*	3.27**	1.65
C. Elementary Education			X	-2.43*	.16	1.89	2.99**	.77
D. English				X	1.24	2.90**	3.70***	2.38*
E. History					X	.75	1.27	.21
F. Industrial Education						X	.73	-.95
G. Physical Education							X	-1.76
H. School Administration								X

*p < .05
**p < .01
***p < .001

t-text Matrix, Verbal Graduate Record Exam Scores by Graduate Major

Appendix B

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	-4.87***	-3.09**	-7.93***	-3.08**	.37	-.28	-3.67***
B. Counselor Education		X	1.99*	-3.78***	.28	4.99***	4.86***	1.04
C. Elementary Education			X	-4.79***	-.63	3.36***	3.04**	-.62
D. English				X	2.99**	7.33***	7.83***	4.38***
E. History					X	2.86**	2.86**	.32
F. Industrial Education						X	-.63	-3.74***
G. Physical Education							X	-3.56***
H. School Administration								X

*p < .05
**p < .01
***p < .001

t-test Matrix, Quantitative Graduate Record Exam Scores by Graduate Major

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	-.19	2.05*	-.37	1.22	.85	1.03	-1.75
B. Counselor Education		X	2.88**	-.26	1.44	1.19	1.45	-1.98*
C. Elementary Education			X	-2.03*	.20	-1.06	-.70	-4.58***
D. English				X	1.59	1.18	1.20	-1.05
E. History					X	-.84	-.50	-2.17*
F. Industrial Education						X	.27	-2.67**
G. Physical Education							X	-2.80**
H. School Administration								X

*p < .05
**p < .01
***p < .001

Composite t-test Matrix, Academic Performance Criteria by Graduate Major

Field of Study		A	B	C	D	E	F	G	H
A. Business	UGPA GRE-V GRE-Q	X	**	** *	***	**		*	***
B. Counselor Education	UGPA GRE-V GRE-Q		X	* **	***		* ***	** ***	 *
C. Elementary Education	UGPA GRE-V GRE-Q			X	* *** *		***	** **	 ***
D. English	UGPA GRE-V GRE-Q				X	**	** ***	*** ***	* ***
E. History	UGPA GRE-V GRE-Q					X	**	**	 *
F. Industrial Education	UGPA GRE-V GRE-Q						X		*** **
G. Physical Education	UGPA GRE-V GRE-Q							X	*** **
H. School Administration	UGPA GRE-V GRE-Q								X

*p < .05
**p < .01
***p < .001

Appendix E

F-Scale Subtest Means by Institutional Type

Subtest	Local Inst.	In-State Public	In-State Private	Out-State Public	Out-State Private
Conventionalism	2.63	2.64	2.64	2.75	2.51
Authoritarian Submission	2.88	2.68	2.75	2.89	2.80
Authoritarian Aggression	2.56	2.58	2.62	2.57	2.46
Anti-Intraception	2.73	2.71	2.46	2.71	2.60
Superstition/Stereotyping	2.59	2.41	2.49	2.74	2.41
Power-Toughness	2.81	2.63	2.74	2.79	2.59
Destructivism/Cynicism	3.12	3.14	3.06	3.23	3.00
Projectivity	2.79	2.64	2.56	2.97	2.57
Sex	2.59	2.51	2.49	2.66	2.63

Analysis of Variance, One-Way-Fixed Effects

Source	SS	df	MS	F	Decision
Treatments (Between Groups)	.25	4	.06	1.50	Accept
Error (Within Groups)	1.45	40	.04	-	-
TOTALS	1.70	44	-	-	-

Gough-Sanford Item Means by Institutional Type

Appendix F

Item Number	Local Inst.	In-State Public	In-State Private	Out-State Public	Out-State Private
1	2.98	3.28	3.83	3.73	3.61
2	2.02	2.14	2.05	1.76	1.9
3	3.18	3.03	3.16	3.15	2.66
4	3.35	3.25	3.5	3.42	3.33
5	3.54	3.46	3.44	3.34	3.33
6	2.58	2.67	2.55	2.8	2.9
7	3.54	3.6	3.44	3.42	3.9
8	3.72	3.75	3.33	3.96	3.61
9	2.61	2.53	2.5	2.23	2.42
10	3.39	3.42	3.22	3.42	3.14
11	3.27	3.28	3.64	3.57	3.23
12	3.12	3.03	2.61	3.07	3.09
13	3.1	3.17	3.55	3.42	2.9
14	2.97	3.21	3.22	3.19	3
15	3.34	3.14	3.16	3.23	3.19
16	3.04	3.03	2.5	3.03	3.14
17	2.96	2.75	2.72	2.73	2.76
18	3.46	3.32	3.5	3	3.52
19	2.39	2.71	2.55	2.65	2.38
20	4.35	4.35	4.27	4.26	4.14
21	3.74	3.78	3.44	3.34	3.71
22	2.74	2.46	2.44	2.5	2.71
Means =	3.2	3.15	3.12	3.15	3.12
Standard Deviation =	.54	.5	.55	.56	.53

Analysis of Variance, One Way, Fixed Effects

Source	SS	df	MS	F	Decision
Treatments (Between Groups)	.11	4	.03	.11	Accept Ho
Error (Within Groups)	29.24	105	.28	-	-
TOTALS	29.35	109	-	-	-

Appendix G

Gough-Sanford Item Means by Discipline

Item Number	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
1	4.04	3.75	3.72	3.9	4	3.66	3.92	3.85
2	2.47	1.72	2	1.7	1.66	1.94	2.21	2
3	3.26	2.86	2.92	2.8	3	3.61	3.5	3.32
4	3.41	3.61	3.35	3.7	4.16	2.94	3.07	3.1
5	3.54	3.38	3.29	4.1	3.5	3.27	3.57	3.64
6	2.91	2.25	2.96	2	2	2.27	2.42	3.07
7	3.33	3.66	3.59	3.9	3.66	3.44	3.07	3.75
8	3.7	3.41	3.87	3.3	3.83	3.27	4	3.96
9	2.62	2.41	2.45	2.7	3.16	2.38	2.64	2.6
10	3.25	3.08	3.55	3.2	3	3.5	3.57	3.25
11	3.12	3.05	3.45	3	3.66	3.33	3.21	3.82
12	2.75	3.36	3	3.3	2.33	3.05	3	3.1
13	3.25	2.94	3.2	3.1	3.5	3.16	3.14	3.35
14	3.04	2.72	3.22	2.5	3.33	2.83	3.07	3.46
15	3.41	3.19	3.11	3.5	3.5	3.16	3.78	3.28
16	2.58	3.05	3	3.2	3.66	2.5	3.35	3.17
17	2.95	2.61	2.88	2.9	2.83	2.77	3	3.21
18	3.29	3.05	3.51	3.2	3.33	3.38	3.78	3.46
19	2.95	2.25	2.77	2	2.5	2	2.42	2.57
20	4.37	4.05	4.31	4.6	4.5	4.27	4.5	4.25
21	3.58	3.69	3.94	3.5	3.66	3.27	3.64	3.42
22	3.04	2.19	2.92	2.7	2.83	2.77	2.21	2.48
Means	3.22	3.01	3.23	3.13	3.25	3.03	3.23	3.28
Standard Deviation	.46	.6	.51	.71	.7	.57	.61	.53

Analysis of Variance, One Way, Fixed Effects

Source	SS	df	MS	F	Decision
Treatments (Between Groups)	1.65	7	.24	.69	Accept Ho
Error (Within Groups)	59.24	168	.35	-	-
TOTALS	60.89	175	-	-	-

Appendix H

F-Scale Subtest Means by Discipline

Subtest	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
Conventionalism	3.03	2.37	2.54	2.38	2.75	2.77	2.67	2.70
Authoritarian Submission	2.98	2.67	2.80	2.63	2.62	2.85	3.06	2.91
Authoritarian Aggression	2.69	2.39	2.46	2.28	2.35	2.82	2.79	2.60
Anti-Intraception	2.96	2.33	2.66	2.43	2.66	2.84	2.69	2.93
Superstition/Stereotyping	2.76	2.47	2.57	2.37	2.33	2.45	2.71	2.55
Power-Toughness	2.84	2.67	2.69	2.70	2.52	2.80	2.86	2.83
Destructivism/Cynicism	3.04	2.97	2.99	2.86	3.25	3.25	3.18	3.46
Projectivity	2.81	2.57	2.71	2.75	2.73	2.78	2.80	2.90
Sex	2.69	2.53	2.48	2.15	2.16	2.90	2.78	2.66

Analysis of Variance, One Way, Fixed Effects

Source	SS	df	MS	F	Decision
Treatments (Between Groups)	1.38	7	.2	4.00	Reject at p .01
Error (Within Groups)	3.16	64	.05	-	-
TOTALS	4.54	71	-	-	-

F-Scale t-test Matrix by Discipline

Field of Study	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
A. Business	X	3.69***	2.59*	4.16***	3.31**	.61	.37	.74
B. Counselor Ed.		X	-.89	.40	-.3	-2.48*	-2.67**	-2.38*
C. Elem. Educ.			X	1.35	.62	-1.66	-1.87	-1.56
D. English				X	-.62	-2.58*	-2.76**	-2.49*
E. History					X	-2.05*	-2.23*	-1.96
F. Indust. Ed.						X	-.19	.09
G. Physical Ed.							X	.28
H. School Admin.								X

*Significant at .05 level (two-tail)
**Significant at .01 level (two-tail)
***Significant at .001 level (two-tail)
df = 56

Appendix I

Conventionalism Subscale of California F-Scale

by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
1. Obedience & Respect	3.45	2.91	2.98	2.7	3.33	3.38	3.71	3.17
12. Bad Manners	2.79	2.38	2.62	2.4	3	2.5	2.42	2.35
37. Talk Less	3.12	2.63	2.79	2.8	3	3.38	2.85	3.14
41. Artist/Businessmen	2.75	1.55	1.77	1.6	1.66	1.83	1.71	2.14
Means	3.03	2.37	2.54	2.38	2.75	2.77	2.67	2.7
Standard Deviations	.33	.59	.53	.54	.74	.75	.84	.53

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	2.60*	2.01	2.65*	.98	.90	1.17	1.36
B. Counselor Ed.		X	-.46	-.03	-.95	-.99	-.72	-.89
C. Elem. Educ.			X	.46	-.56	-.61	-.33	-.46
D. English				X	-.97	-1.02	-.73	-.92
E. History					X	-.04	.16	.11
F. Indust. Ed.						X	.20	.15
G. Physical Ed.							X	-.06
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 6

Authoritarian-Submission Subscale

of California F-Scale by Academic Discipline

Appendix J

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
1. Obedience & Respect	3.45	2.91	2.98	2.7	3.33	3.38	3.71	3.17
4. Science	3.08	3.25	3.18	3.2	2.5	2.72	3.28	3.1
8. Supernatural Power	3	2.58	2.88	2.7	2.83	3.16	3.28	2.85
21. Rebellious Ideas	3.52	3	3.33	3.4	2.83	3.27	3.35	3.57
23. Devoted Leaders	3.17	2.71	2.86	2.6	2.66	3.44	2.71	3.1
42. No Sane Person	1.82	1.83	1.7	1.4	2.16	1.77	1.92	2.1
44. Suffering	2.82	2.41	2.67	2.4	2	2.22	3.14	2.48
Means	2.98	2.67	2.8	2.63	2.62	2.85	3.06	2.91
Standard Deviations	.57	.46	.53	.64	.45	.64	.58	.49

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	1.28	.73	1.39	1.49	.52	-.32	.29
B. Counselor Ed.		X	-.63	.19	.25	-.84	-1.86	-1.18
C. Elem. Educ.			X	.71	.79	-.21	-1.11	-.48
D. English				X	.04	-.78	-1.55	-1.02
E. History					X	-1.11	-2.16	-1.47
F. Indust. Ed.						X	-.76	-.22
G. Physical Ed.							X	.60
H. School Admin.								X

*Significant at .05 level } df = 12

Appendix K

Authoritarian Aggression Subscale of California F-Scale by Academic Discipline

Item Ident.	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
12. Bad Manners	2.79	2.38	2.62	2.4	3.0	2.5	2.42	2.35
13. Discipl.& Deter.	3.12	2.63	2.79	2.8	3.0	3.38	2.85	3.14
19. Honor	2.91	2.86	2.87	2.4	2.66	2.88	3.64	3.14
25. Sex Crimes	2.40	2.11	2.09	2.1	1.66	2.50	2.50	2.03
27. Undying Love	2.87	2.80	2.70	2.3	2.33	3.44	3.28	3.07
34. Immoral People	2.60	2.50	2.61	2.4	2.5	3.22	2.85	2.75
37. Talk Less	2.43	2.05	2.01	2.3	1.66	2.22	2.35	2.14
39. Homosexuals	2.41	1.77	2.01	1.5	2.0	2.44	2.42	2.14
Means =	2.69	2.39	2.46	2.28	2.35	2.82	2.79	2.60
Standard Deviation =	.27	.38	.36	.37	.54	.47	.47	.48

t Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	2.62*	2.03	3.61**	2.71*	-1.08	-.83	.74
B. Counselor Ed.		X	-.46	.72	.25	-2.71*	-2.53*	-1.32
C. Elem. Educ.			X	1.23	.71	-2.38*	-2.19*	-.92
D. English				X	-.45	-3.52**	-3.34**	-2.08
E. History					X	-2.20*	-2.06	-1.17
F. Indust. Ed.						X	.16	1.16
G. Physical Ed.							X	1.01
H. School Admin.								X

*Significant at .05 level (two-tail)
**Significant at .01 level (two-tail)
df = 14

Appendix L

Anti-Intraception Subscale

of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
9. Cheerful Things	3.12	2.63	2.79	2.8	3	3.38	2.85	3.14
31. Prying	2.75	1.55	1.77	1.6	1.66	1.83	1.71	2.14
37. Talk Less	2.52	2.16	2.61	2	2.66	2.61	2.64	2.82
41. Artists/Businessmen	3.43	2.97	3.47	3.33	3.33	3.55	3.57	3.6
Means	2.96	2.33	2.66	2.43	2.66	2.84	2.69	2.93
Standard Deviations	.4	.62	.7	.78	.72	.79	.77	.61

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	2.16	.98	1.64	.96	.37	.84	.10
B. Counselor Ed.		X	-.81	-.24	-.80	-1.21	-.86	-1.51
C. Elem. Educ.			X	.50	0	-.39	-.07	-.61
D. English				X	-.46	-.81	-.52	-1.03
E. History					X	-.38	-.06	-.60
F. Indust. Ed.						X	.30	-.18
G. Physical Ed.							X	-.50
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 6

Appendix M

Superstition/Stereotyping Subscale of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
4. Science	3.08	3.25	3.18	3.2	2.5	2.72	3.28	3.1
8. Supernatural Power	2.82	2.41	2.67	2.4	2	2.22	3.14	2.48
16. Born with Urge	3	2.19	2.42	2.5	2.83	2.5	2.71	2.67
26. Weak & Strong	2.37	2.02	2.01	1.7	1.66	2.33	2	2.14
29. Astrology	2.82	2.5	2.59	2.1	2.5	2.5	2.42	2.14
33. Earthquake	2.47	2.47	2.57	2.3	2.5	2.44	2.71	2.75
Means	2.76	2.47	2.57	2.37	2.33	2.45	2.71	2.55
Standard Deviations	.28	.42	.38	.5	.42	.17	.47	.37

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	1.95	1.31	2.50	2.89*	2.37	.33	1.46
B. Counselor Ed.		X	-.50	.48	.69	.10	-1.16	-.40
C. Elem. Educ.			X	1.04	1.29	.70	-.74	.11
D. English				X	.17	-.36	-1.43	-.77
E. History					X	-.63	-1.83	-1.09
F. Indust. Ed.						X	-2.27	-.98
G. Physical Ed.							X	.73
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 10

Appendix N

Power/Toughness Subscale

of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
2. Will Power	3.52	3	3.33	3.4	2.83	3.27	3.35	3.57
13. Discipline	2.91	2.86	2.87	2.4	2.66	2.88	3.64	3.14
19. Honor	2.4	2.11	2.09	2.1	1.66	2.5	2.5	2.03
22. Viet Nam (Germany)	2.37	2.02	2.01	1.7	1.66	2.33	2	2.14
23. Devoted Leaders	3.5	3.75	3.48	3.8	3.5	3.55	3.57	3.53
26. Weak & Strong	2.41	2.52	2.38	2.5	2.16	2.27	2.21	2.33
38. Plots	2.79	2.44	2.68	3	3.16	2.82	2.78	3.1
Means	2.84	2.67	2.69	2.7	2.52	2.8	2.86	2.83
Standard Deviations	.5	.59	.58	.74	.72	.48	.66	.65

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	.76	.67	.60	1.38	.18	-.09	.04
B. Counselor Ed.		X	-.08	-.11	.56	-.51	-.72	-.61
C. Elem. Educ.			X	-.04	.65	-.45	-.66	-.55
D. English				X	.56	-.32	-.50	-.41
E. History					X	-.93	-1.09	-1.00
F. Indust. Ed.						X	-.27	-.14
G. Physical Ed.							X	.10
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 12

Appendix O

Destructiveness/Cynicism Subscale of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
6. War and Conflict	3.58	3.66	3.59	3.5	3.66	3.94	3.71	4.00
43. Familiarity	2.54	2.27	2.38	2.22	2.83	2.55	2.64	2.92
Means	3.06	2.97	2.99	2.86	3.25	3.25	3.18	3.46
Standard Deviations	.74	.98	.86	.91	.59	.98	.76	.76

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	.09	.07	.21	-.23	-.19	-.13	-.44
B. Counselor Ed.		X	-.02	.09	-.26	-.23	-.19	-.44
C. Elem. Educ.			X	.12	-.27	-.24	-.19	-.46
D. English				X	-.39	-.34	-.30	-.57
E. History					X	0	.09	-.26
F. Indust. Ed.						X	.06	-.19
G. Physical Ed.							X	-.30
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 2

Appendix P

Projectivity Subscale

of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
18. Infection & Disease	2.47	2.47	2.57	2.3	2.5	2.44	2.71	2.75
31. Prying	2.79	2.44	2.68	3	3.16	2.82	2.78	3.1
33. Earthquake	2.6	1.97	2.11	2.44	2.5	2.27	2.28	2.28
35. Wild Sex Life	3.43	2.97	3.47	3.33	3.33	3.55	3.57	3.6
38. Plots	2.78	3.02	2.72	2.66	2.16	2.83	2.64	2.78
Means	2.81	2.57	2.71	2.75	2.73	2.78	2.8	2.9
Standard Deviations	.37	.43	.49	.42	.49	.49	.47	.49

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	1.15	.47	.29	.37	.14	.05	-.42
B. Counselor Ed.		X	-.58	-.76	-.66	-.86	-.95	-1.36
C. Elem. Educ.			X	-.15	-.07	-.26	-.34	-.71
D. English				X	.08	-.13	-.21	-.63
E. History					X	-.18	-.26	-.63
F. Indust. Ed.						X	-.07	-.45
G. Physical Ed.							X	-.38
H. School Admin.								X

*Significant at .05 level (two-tail) } df = 8

Appendix Q

Sex Subscale

of California F-Scale by Academic Discipline

Item Identification	BUS	CED	ElEd	ENG	HIS	ITE	PED	SchAdm
25. Sex Crimes	2.87	2.8	2.7	2.3	2.33	3.44	3.28	3.07
35. Wild Sex Life	2.41	1.77	2.01	1.5	2	2.44	2.42	2.14
39. Homosexuals	2.78	3.02	2.72	2.66	2.16	2.83	2.64	2.78
Means	2.69	2.53	2.48	2.15	2.16	2.9	2.78	2.66
Standard Deviations	.24	.67	.4	.59	.17	.5	.45	.48

t-Matrix

Field of Study	A	B	C	D	E	F	G	H
A. Business	X	.50	.88	1.82	2.86*	-.78	-.36	.12
B. Counselor Ed.		X	.10	.72	.78	-.72	-.49	-.25
C. Elementary Ed.			X	.88	1.09	-1.19	-.88	-.52
D. English				X	-.02	-1.6	-1.38	-1.10
E. History					X	-3.13*	-2.86*	-2.21
F. Indust. Ed.						X	.30	.59
G. Physical Ed.							X	.32
H. School Admin.								X

*Significant at .05 level (two-tail) df = 4

GOUGH-SANFORD RIGIDITY SCALE

Raw Score =	110	88	66	44	22
	highest poss. score		neutral score		lowest poss. score
Adjectives (Men) (CPI-Fx)	easy going fickle independent lazy optimistic pleasure-seeking quick sharp-witted spend thrift spontaneous				determined efficient hard-headed organized planful practical stern stubborn stoic thorough
Adjectives (Women) (CPI-Fx)	careless clever imaginative individualistic ingenious mischievious original pleasure-seeking sociable				cautious conscientious conservative defensive prudish rigid slow simple sincere self-punishing

Gough-Sanford Rigidity Scale

Mean Scores of Graduate Students*

Graduates of the local institution	= 70.4
Graduates of other Nebraska Public Colleges	= 63.4
Graduates of other Nebraska Private Colleges	= 68.6
Graduates of Out-of-State Public Colleges	= 69.2
Graduates of Out-of-State Private Colleges	= 68.6

Mean Scores of Graduate Students by Discipline

Business	= 70.9	History	= 71.6
Counselor Education	= 66.3	Industrial Education	= 66.8
Elementary Education	= 71.0	Physical Education	= 71.1
English	= 68.6	School Administration	= 72.1**

*None significant when compared to "neutral" score of 66, df = 42.
**Barely significant at $p < .05$ when compared to "neutral" score of 66, df = 42.

Appendix S

CALIFORNIA F SCALE

Raw Score =	145	- 116 -	87	- 58 -	29
	↓ highest poss. score		↓ hypothetical "neutral" score		↓ lowest poss. score
Adjectives (Men) (CPI-To)	affected				forgiving
	cold				generous
	egotistical				good-natured
	fussy				independent
	hard-hearted				informal
	self-centered				pleasant
	shallow				reasonable
	thankless				soft-hearted
	whiny				thoughtful
	fault-finding				unselfish
Adjectives (Women) (CPI-To)	arrogant				calm
	autocratic				efficient
	bitter				insightful
	defensive				leisurely
	distrustful				logical
	hard-headed				mature
	infantile				responsible
	resentful				self-controlled
	restless				tactful
	sarcastic				understanding

California F Scale

Mean Scores of Graduate Students

Graduate of the local institution	= 78.7**
Graduates of other in-state Public Colleges	= 75.4***
Graduates of other in-state Private Colleges	= 75.3***
Graduates of Out-of-State Public Colleges	= 80.2*
Graduates of Out-of-State Private Colleges	= 74.2***

Mean Scores of Graduate Students by Discipline

Business	= 82*	Industrial Education	= 80.5*
Counselor Education	= 73.3***	Physical Education	= 81.3*
Elementary Education	= 76.1***	School Administration	= 80.5*
English	= 72.3***		
History	= 74.2***		

* $p < .05$
** $p < .01$
*** $p < .001$

when compared to mean "neutral" score of 87, two-tail t-tests, df = 56

Appendix T

AUTHORITARIAN AGGRESSION SUBSCALE

(using 5 point Likert Scale)

40	-	32	-	24	-	16	-	8
↓				↓				↓
highest poss. score				neutral score				lowest poss. score
more Authoritarian/ Aggressive								less Authoritarian/ Aggressive

Authoritarian Aggression Subscale

Mean Scores of Graduate Students by Institutional Type

Graduates of the local institution	= 20.46**
Graduates of other In-State Public Colleges	= 19.97**
Graduates of In-State Private Colleges	= 20.92*
Graduates of Out-of-State Public Colleges	= 20.55**
Graduates of Out-of-State Private Colleges	= 19.68***

Mean Scores of Graduate Students by Discipline

Business	= 21.5**	Industrial Education	= 22.6
Counselor Education	= 19.1***	Physical Education	= 22.3
Elementary Education	= 19.7***	School Administration	= 20.8*
English	= 18.2***		
History	= 18.8**		

* $p < .05$
** $p < .01$
*** $p < .001$

when compared to mean "neutral" score, df = 14

Appendix U

AUTHORITARIAN AGGRESSION SUBSCALE

(using 7 point Likert Scale)

56 - 48 - 40 - 32 - 24 - 16 - 8

↓ highest possible score → more authoritarian/ aggressive

↓ neutral score

↓ lowest possible score → less authoritarian/ aggressive

Groups Sampled

George Washington University Women (N = 132)
California Service Club Mean (N = 63)
Middle Class Men (N = 69)
Middle Class Women (N = 154)
Working Class Men (N = 61)
Working Class Women (N = 53)
Los Angeles Men (N = 117)
Los Angeles Women (N = 130)
Testing Class Women (N = 59)
San Quentin Men Prisoners (N = 110)
Psychiatric Clinic Women (N = 71)
Psychiatric Clinic Men (N = 50)
Employment Service Men Veterans (N = 106)
Maritime School Men (N = 343)

Authoritarian Aggression Mean Scores*

Men (7 groups, N = 919)	= 33.3 (t = .57)
Women (7 groups, N = 599)	= 29.86 (t = .96)
Men and Women (14 groups, N = 1518	= 31.59 (t = .18)

*none significant at .05 level, 14 df